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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/671,302

09/24/2003

Navin Kumar

126816 (GEN-0352)

9913

23413

7590

01/21/2005

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EXAMINER

DONOVAN, LINCOLN D

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 01/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/671,302

Applicant(s)

KUMAR ET AL.

Examiner

Lincoln Donovan

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>09-24-03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Election was made **without** traverse of the species shown in figures 1-4 in the reply filed on 11-05-04.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 and 13, applicant should clarify what is intended by “degree of freedom.” It is not clear what the “degree of freedom” is relative to. Applicant should clarify the specific structure and intent of the “crossbar remaining ‘substantially stationary’ during the tripping operation.

Regarding claim 4, applicant should clarify what is meant by “tends to.”

Regarding claim 10, applicant should clarify how the first and second air gaps are adjusted in “unison” and “adjusting the second air gap while maintaining the first air gap constant; and fixing the second gap to be constant.” It is not clear how the air gaps are adjusted both simultaneously and independently.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2832

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Faber et al. [US 5,718,328].

Regarding claim 1, Faber et al. discloses a trip system for a circuit breaker comprising:

- a trip unit [80] responsive to an electric current for generating a trip force;
- a support frame [53];
- a crossbar [84] directly coupled to the trip unit and to the support frame; and
- a trip bar [82] directly coupled to the support frame responsive to the trip force generated at the trip unit.

Regarding claim 2, Faber et al. discloses the trip unit cooperating with primary and secondary latches [62, 64] to trip the circuit breaker.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 10-15, as best understood in view of the rejections under USC 112, 2nd paragraph, are rejected under 35 U.S.C. 103(a) as being unpatentable over Faber et al. in view of Kolberg et al. [US 5,831,501].

Regarding claims 3 and 13-14, Faber et al. disclose everything claimed except the specific structure of the trip unit and the adjustment means therefor.

Kolberg et al. discloses a trip unit [22] for a circuit breaker having a trip member comprising a plunger [86] supporting an actuator frame [84] having two ends [figure 3, column 4, lines 40-64] with a first end air gap adjuster [162, figure 2] for adjusting a first air gap at the trip unit between a pole piece and the plunger for adjusting the responsiveness of the trip unit with respect to the electric current [column 5, line 59-column 6, line 7] and a rotatable second end adjuster [150, figures 2-3 and 6] for adjusting an air gap and stroke between the trip member frame/cage and trip actuator.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the trip unit design of Kolberg et al. for the trip unit of Faber et al. in order to provide greater adjustment capability.

Regarding claims 10-12, as best understood in view of the rejections under USC 112, 2nd paragraph, the claimed method steps would have been necessitated by the product structure. The sizes of the gaps relative to each other to provide adjustment to the trip unit would have been obvious design considerations based on the intended sensitivity of the trip unit.

Regarding claim 15, Kolberg et al. further discloses the dimension of the second air gap being responsive to adjustment of the second adjuster [figure 2].

Allowable Subject Matter

Claims 4-9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

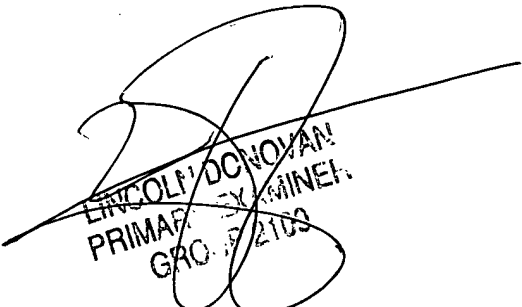
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lincoln Donovan whose telephone number is 571-272-1988. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ldd


LINCOLN DONOVAN
PRIMARY EXAMINER
GPO 8/21/03